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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,551	12/14/2000	Satoshi Kidooka	P20361	6566
7055	7590	07/14/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			LAM, ANN Y	
			ART UNIT	PAPER NUMBER
			1641	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/735,551	<b>Applicant(s)</b> KIDOOKA, SATOSHI	
	<b>Examiner</b> Ann Y. Lam	<b>Art Unit</b> 1641	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Although Applicant has placed the application in condition for allowance based on the final Office action dated March 24, 2004, upon further consideration the finality of that action is withdrawn and Examiner believes that the following rejection is appropriate. Examiner apologizes for the inconvenience.

### ***Claim Objections***

1. Claims 1-5 and 29 are objected to because of the following informalities: in claim 1, line 6, "is" should be deleted; and in claim 1, line 7, the colon mark should be a semi-colon mark. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29, recites the limitation “liquid supply tube” in line 1. There is insufficient antecedent basis for this limitation in the claim. (The term “supply” should be – supplying.)

### ***Double Patenting***

3. Claims 1-5 and 29 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,354,519. Although the conflicting claims are not identical, they are not patentably distinct from each other because Patent ‘519 discloses an endoscope comprising:

- a channel (i.e., endoscope in line 1 of claim 1);

- an endoscopic spraying instrument comprising:

- a tube (i.e., liquid transfer tube in line 2 of claim 1) configured to pass liquid therethrough and configured to be removably inserted into the treatment instrument channel (line 1 of claim 1, “for an endoscope);

- a rotatably guiding groove (i.e., spiral guide channel in line 5 of claim 1) disposed at a leading end side of the supplying tube and configured to rotate the liquid about a central axis;

- a liquid rotating chamber (i.e., liquid whirling chamber in line 7 of claim 1) disposed at a leading end side of the rotatably guiding groove, the liquid rotating chamber configured to rotate the liquid therein;

a spray nozzle (i.e., distal end portion of liquid whirling chamber in line 7 of claim 1) formed in a leading end wall of the liquid rotating chamber and configured to discharge the liquid from the liquid rotating chamber; and

an annular, protruded wall (i.e., inner surface in line 19 of claim 1) spaced outwardly from an outer periphery of the spray nozzle, the wall protruded forwardly from and surrounding an exit of the spray nozzle.

As to claim 2, a wall surface extending between the outer periphery of the spray nozzle and the annular, protruded wall is defined by a tapered surface or a curved, concave surface (line 12 of claim 1.)

As to claim 3, a wall surface extending between the outer periphery of the spray nozzle and the annular, protruded wall is defined by a planar surface perpendicular to an axis of the spray nozzle (lines 13-17 of claim 1.) (Examiner notes that Applicant has not specified in claim 3 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 4, a wall surface of the annular, protruded wall is parallel to an axis of the spray nozzle. (lines 13-17 of claim 1). (Examiner notes that Applicant has not specified in claim 4 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 5, a wall surface of the annular, protruded wall is defined by a forwardly spread surface or a forwardly constricted surface (line 12 of claim 1.)

As to claim 29, the liquid supply tube is substantially coaxial with the spray nozzle (line 1 of claim 1, "for an endoscope).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu, Japanese Utility Model Publication No. Hei-7-51066.

Shimizu discloses an endoscope comprising:

a treatment instrument channel (i.e., endoscope, page 1);

an endoscopic spraying instrument (4) comprising:

a liquid supplying tube (7) configured to pass liquid therethrough and to be removably inserted into the treatment instrument channel (endoscopes, page 1);

a rotatingly guiding groove (8) disposed at a leading end side of the supplying tube and configured to rotate the liquid about a central axis;

a liquid rotating chamber (10) disposed at a leading end side of the rotatingly guiding groove, the liquid rotating chamber configured to rotate the liquid therein;

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a spray nozzle (distal end portion of 10) formed in a leading end wall of the liquid rotating chamber and configured to discharge the liquid from the liquid rotating chamber; and

an annular, protruded wall (5a) spaced outwardly from an outer periphery of the spray nozzle, the wall protruded forwardly from and surrounding an exit of the spray nozzle.

As to claim 2, a wall surface (5b) extending between the outer periphery of the spray nozzle and the annular, protruded wall is defined by a tapered surface or a curved, concave surface.

As to claim 3, a wall surface (distal end portion of 5a) extending between the outer periphery of the spray nozzle and the annular, protruded wall (proximal end portion of 5a) is defined by a planar surface perpendicular to an axis of the spray nozzle. (Examiner notes that Applicant has not specified in claim 3 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 4, a wall surface of the annular, protruded wall (5a) is parallel to an axis of the spray nozzle (see page 6, last paragraph, and figure 2.) (Examiner notes that Applicant has not specified in claim 4 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 5, a wall surface of the annular, protruded wall (5a and 5b) is defined by a forwardly spread surface or a forwardly constricted surface (see page 6, last paragraph, and figure 2.)

As to claim 29, the liquid supply tube (7) is substantially coaxial with the spray nozzle (10), (see figure 2.)

5. Claims 1-5 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi, Japanese Unexamined Patent No. Hei-6-70986.

Kobayashi discloses an endoscope comprising:

a treatment instrument channel (i.e., endoscope, page 1, or alternatively, tube 1 in figure 2);

an endoscopic spraying instrument (3) comprising:

a liquid supplying tube (8) configured to pass liquid therethrough and to be removably inserted into the treatment instrument channel (i.e., endoscopes on page 1 or alternatively, tube 1 in figure 2);

a rotatingly guiding groove (5) disposed at a leading end side of the supplying tube and configured to rotate the liquid about a central axis;

a liquid rotating chamber (10) disposed at a leading end side of the rotatingly guiding groove, the liquid rotating chamber configured to rotate the liquid therein;

a spray nozzle (i.e., nozzle near opening 6, see figure 2) formed in a leading end wall of the liquid rotating chamber and configured to discharge the liquid from the liquid rotating chamber; and

an annular, protruded wall (i.e., annular wall near opening 6, see figure 2) spaced outwardly from an outer periphery of the spray nozzle, the wall protruded forwardly from and surrounding an exit of the spray nozzle.

As to claim 2, a wall surface (i.e., tapered wall near opening 6, see figure 2) extending between the outer periphery of the spray nozzle and the annular, protruded wall is defined by a tapered surface or a curved, concave surface.

As to claim 3, a wall surface (i.e., annular wall near opening 6 with same diameter throughout, see figure 2) extending between the outer periphery of the spray nozzle and the annular, protruded wall is defined by a planar surface perpendicular to an axis of the spray nozzle. (Examiner notes that Applicant has not specified in claim 3 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 4, a wall surface (i.e., annular wall near opening 6 with same diameter throughout, see figure 2) of the annular, protruded wall is parallel to an axis of the spray nozzle. (Examiner notes that Applicant has not specified in claim 4 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 5, a wall surface (i.e., tapered wall near opening 6, see figure 2) of the annular, protruded wall is defined by a forwardly spread surface or a forwardly constricted surface.

As to claim 29, the liquid supply tube (8) is substantially coaxial with the spray nozzle (see figure 2.)

6. Claims 1-5 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Century, 6,016,800.

Century discloses a device comprising:

a channel (i.e., bronchoscope, column 2, lines 25-26);

an endoscopic spraying instrument comprising:

a tube (12) configured to pass liquid therethrough;

a rotatingly guiding groove (16) disposed at a leading end side of the supplying tube and configured to rotate the liquid about a central axis;

a liquid rotating chamber (18) disposed at a leading end side of the rotatingly guiding groove, the liquid rotating chamber configured to rotate the liquid therein;

a spray nozzle (23) formed in a leading end wall of the liquid rotating chamber and configured to discharge the liquid from the liquid rotating chamber;  
and

an annular, protruded wall (i.e., annular protruded wall near 23 in figure 2a) spaced outwardly from an outer periphery of the spray nozzle, the wall protruded forwardly from and surrounding an exit of the spray nozzle.

As to claim 2, Century discloses a wall surface (i.e., concave surface of 20) extending between the outer periphery of the spray nozzle (i.e., proximal portion of 20) and the annular, protruded wall (i.e., distal portion of 20) is defined by a tapered surface or a curved, concave surface.

As to claim 3, a wall surface (i.e., concave surface of 20) extending between the outer periphery of the spray nozzle (i.e., proximal portion of 20) and the annular, protruded wall (i.e., distal portion of 20) is defined by a planar surface perpendicular to an axis of the spray nozzle. (Examiner notes that Applicant has not specified in claim 3 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 4, a wall surface (i.e., distal portion of 20) of the annular, protruded wall is parallel to an axis of the spray nozzle. (Examiner notes that Applicant has not specified in claim 4 as to which axis Applicant is referring, e.g., longitudinal axis, etc.)

As to claim 5, a wall surface (20) of the annular, protruded wall is defined by a forwardly spread surface or a forwardly constricted surface.

As to claim 29, the liquid supply tube (30) is substantially coaxial with the spray nozzle (12), (see figure 2a.)

### ***Conclusion***

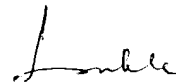
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Y. Lam whose telephone number is 571-272-0822. The examiner can normally be reached on M-Sat 11-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.L.



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07/12/04